Research Paper | Education | E-ISSN No : 2454-9916 | Volume : 10 | Issue : 10 | October 2024

MENTAL HEALTH IN SECONDARY SCHOOL STUDENTS: THE ROLE OF SOME DEMOGRAPHIC FACTORS

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ABSTRACT

This study investigates the mental health status of higher secondary school students in Hooghly district, concentrating on depression, anxiety, and stress, and how demographic characteristics such as gender, family structure, and grade affect these outcomes. This study is a cross-sectional survey. Data were gathered utilising the DASS-21 scale, involving 200 students from grades XI and XII. Research indicates that the majority of students exhibit normal mental health levels; nonetheless, significant percentages display mild to moderate symptoms, especially with anxiety and sadness. Statistical analysis indicated no significant disparities in mental health concerning gender, family structure, grade, or age, suggesting that these demographic characteristics may not independently affect mental well-being in this cohort. The research highlights the necessity of accessible mental health resources at educational institutions, including counselling and peer support, to manage mild symptoms and avert escalation. Customised mental health therapies are crucial for assisting teenagers in stress management and resilience building, hence fostering academic achievement and personal growth.

KEYWORDS: Mental Health, Demographic Factors, Higher Secondary School Students

INTRODUCTION

Mental health is an essential element of secondary education, providing a fundamental basis for students' personal, academic, and social development. During the higher secondary education time, generally spanning ages 15 to 18, teenagers face a distinctive combination of academic demands, social pressures, and developmental transformations that can profoundly affect their mental health. The escalating pressures associated with academic achievement, professional development, and social assimilation can result in elevated levels of stress, anxiety, and potentially depression among students. Studies reveal that over 20% of teenagers worldwide suffer from mental health issues, with anxiety and depression being the most often documented diseases (World Health Organisation, 2021). These stressors can lead to problems such as sleep disruptions, reduced self-esteem, and decreased resilience, which may negatively impact kids' overall academic performance and well-being. Mental health issues present in diverse forms, encompassing common diseases such as anxiety and depression, with more serious conditions like bipolar disorder and schizophrenia (Kitchener & Jorm, 2002). The competitive dynamics of secondary education, coupled with substantial hormonal and physical changes, intensify these mental health issues. The National Institute of Mental Health (NIMH, 2020) indicates that the stresses encountered by teenagers can elevate the risk of mental health disorders, underscoring the necessity of early intervention and assistance. The need of cultivating healthy school settings that provide mental health resources, including counselling services and peer support programs, is paramount. These materials are essential for kids to develop resilience, handle stress efficiently, and foster a pleasant school environment that improves both emotional and academic results (American Psychological Association, 2022). Institutions that adopt mental health initiatives and promote candid dialogues around mental well-being cultivate a culture of acceptance, thereby diminishing stigma and motivating students to pursue assistance when necessary. Examining the impact of demographic factors—such as gender, financial level, and rural vs urban backgrounds—is crucial for comprehending the inequalities in mental health outcomes among secondary school students. Demographic characteristics can profoundly influence students' experiences and coping strategies, highlighting the necessity for mental health programs to be customised to address various requirements. By implementing comprehensive mental health support systems in educational institutions, schools can aid students in stress management and mitigate the risk of enduring mental health issues, thereby promoting healthier transitions into adulthood (National Alliance on Mental Illness, 2021). This study seeks to investigate the impact of demographic characteristics on mental health outcomes among secondary school students, given the essential role of mental health in promoting resilience, academic success, and overall life satisfaction. Implementing early interventions and tailored mental health support is crucial for immediate academic achievement and for providing students with lasting coping techniques, thus establishing a foundation for sustained emotional and psychological well-being. Mental health pertains to an individual's emotional, psychological, and social welfare. It impacts individuals' cognition, emotions, and behaviours, affecting their capacity to manage stress, interact with others, and make decisions (World Health Organisation, 2018). Mental health spans a wide range, from optimal psychological well-being to several mental health diseases. Depression, anxiety, and stress frequently exhibit overlapping symptoms, including

irritability, exhaustion, concentration difficulties, and sleep abnormalities. The overlapping symptoms can complicate the differentiation and management of various disorders (Beck & Clark, 1997). Depression, anxiety, and stress are linked to the body's stress-response system, which is governed by neurotransmitters such as serotonin, norepinephrine, and dopamine. These neurotransmitters are crucial in modulating mood and emotions, and their dysregulation is frequently associated with these diseases (Charney & Nestler, 2004). Mental health denotes a dynamic condition enabling humans to manage challenges, make significant decisions, and cultivate relationships. Depression, anxiety, and stress are interconnected, with each potentially exacerbating the others. Effective therapies or coping methods are frequently essential for restoring or sustaining well-being.

Rationale of the study

The importance of mental health in higher secondary education is substantial, since it influences students' academic achievement, social relationships, personal development, and long-term psychological well-being. The secondary school phase is a crucial developmental period during which kids encounter many pressures and swift transformations, potentially impacting their mental health in enduring ways. The mental health of secondary school pupils is influenced by a complex interaction of demographic factors, which greatly affects their academic achievement, emotional resilience, and social interactions. Studies indicate that adolescents from economically underprivileged homes are especially susceptible to psychosomatic diseases, impulsive behaviours, and depressive symptoms. These disorders frequently stem from elevated stress levels and insufficient coping mechanisms, exacerbated by socioeconomic obstacles that hinder access to mental health facilities (Kumar Thirukkovela & Dhanalakota, 2015). Moreover, inflexible educational systems, especially in public institutions with rigorous timetables and limited recreational opportunities, have been demonstrated to adversely affect students' mental well-being. Urban and rural environments exhibit significant differences in mental health outcomes. metropolitan students typically exhibit superior mental well-being relative to their rural counterparts, a disparity ascribed to enhanced access to educational resources and mental health care in metropolitan settings (Rabbani & Barman, 2023; Kaur & Puar, 2017). Gender disparities further influence these mental health variations, with multiple studies indicating that female students achieve higher scores on mental health assessments compared to their male counterparts, potentially reflecting differences in emotional expression, resilience, or the availability of social support networks for each gender (Bandhana & Sharma, 2010, 2012). The type of school, namely public versus private institutions, has been demonstrated to influence mental health. pupils in government schools frequently encounter greater difficulties with adjustment and feelings of insecurity, whereas private school pupils indicate elevated levels of emotional stability and overall mental well-being. This disparity may be linked to variations in educational resources, support services, and the pressures stemming from academic expectations across different types of institutions (Kumari & Nisha, 2019). The influence of family structure—whether a student is part of a nuclear or extended family—seems to have a minimal effect on mental health outcomes (Joseph, 2015). Research constantly emphasises the significance of a supportive family environment for teenage well-being, since stability within the household promotes healthier mental states among students (Mahalakshmi & Ugalenthy, 2015). Birth order influences mental well-being, as research indicates that last-born children frequently report superior mental health compared to their first- or middle-born siblings, possibly attributable to variations in parental expectations and support dynamics (Geetha & Girija, 2014). The educational environment also impacts mental health. No notable disparities in mental health scores have been observed between students in the arts and commerce streams; nonetheless, the interplay between academic discipline and gender may influence mental health outcomes, with specific combinations presenting unique problems and advantages (Patel, 2020). Mental health is strongly connected with academic performance; individuals with lower stress levels and more mental health stability typically have higher academic success (Murugan, 2017). The inclusion of qualified mental health specialists in schools has been advocated to assist pupils in managing stress and addressing the problems of secondary education, thereby offering vital support during this crucial developmental phase (Jacob et al., 2023). Recognising the influence of demographic characteristics on mental health can assist schools in providing customised support, enabling kids to excel academically and personally. The provision of mental health care in higher secondary education is crucial for promoting academic achievement, emotional resilience, social connectedness, and long-term well-being. By prioritising early mental health intervention, schools foster the growth of well-rounded, resilient young individuals capable of excelling in diverse life domains. Various aspects are significant for mental wellness.

OBJECTIVES

To know the status on depression, anxiety, and stress of higher secondary school students in Hooghly district

To find out the mean comparison between boys and girls on mental health of higher secondary school students in Hooghly district

To find out the mean comparison on mental health of higher secondary school students in Hooghly district with regards to their type of family

To find out the mean comparison on mental health of higher secondary school students in Hooghly district with regards to their grade

To Know the association between level of mental health and age of higher secondary school students in Hooghly district.

HYPOTHESIS

H01 there is no significant mean difference on mental health of higher secondary school students in Hooghly district regarding gender.

H02 there is no significant mean difference on mental health of higher secondary school students in Hooghly district with respect to their type of family.

H03 there is no significant mean difference on mental health of higher secondary school students in Hooghly district with respect to their grade.

H04 there is no association between level of mental health and age of higher secondary school students in Hooghly district.

METHODOLOGY

Participants

Students from higher secondary schools in Hooghly district are chosen for the study. Two blocks in the Hooghly district have been picked, and two schools have been conveniently chosen from each block. Fifty pupils (25 from XI and 25 from XII) are randomly picked from each school.

Method

This research is a cross-sectional survey study. Students from various age groups (15-19 years), specifically from classes XI and XII, are picked from both the Arts and Science streams.

Instruments

Two instruments are employed for data collection i.e. a personal information sheet and the Mental Health Scale (DASS 21). The personal information sheet comprises demographic characteristics like age, gender, family type, grade and stream of study. Mental Health scale created by Lovibond and Lovibond in 1995. It is a four-point evaluation measure. The response for each item is rated as 0, 1, 2, or 3, with '0' representing Did not apply to me at all - NEVER; '1' indicates it applied to me to some degree or sometimes - SOMETIMES; '2' signifies it applied to me to a substantial degree or frequently - OFTEN; and '3' denotes it applied to me very much - ALMOST ALWAYS. This scale comprises 21 items, and the resulting value is multiplied by two, as it effectively consists of 42 items. The DASS-21 scale is adequately reliable and valid. The reliability assessment of DASS-21 yields standard values of 0.81, 0.89, and 0.78 for the constructs of depression, anxiety, and stress, respectively, as indicated by Cronbach's alpha coefficient. The outcome indicated the presence of internal consistencies, as well as discriminative, concurrent, and convergent validities. It is simultaneously reliable, valid, and easily applicable.

Statistical analysis

Subsequent to data collection, the raw data undergoes cleaning and mining for analysis purposes. The SPSS 21 software is utilised for data analysis. The statistical analyses include percentage calculations, independent t-tests, and chi-square tests.

RESULTS

Severity	Depression		Anxiety		Stress	
	N	%	N	%	N	%
Normal	131	65.5	99	49.5	154	77.0
Mild	62	31.0	79	39.5	40	20.0
Moder-ate	7	3.5	22	11.0	6	3.0

Table 1: showing the status on depression, anxiety, and stress of higher secondary school students in Hooghly district

Interpretation

In a study assessing mental health among higher secondary school students in Hooghly district, 65.5% exhibited normal levels of depression, 49.5% had normal levels of anxiety, and 77% showed normal stress levels. Mild levels were reported in 31% for depression, 39.5% for anxiety, and 20% for stress, while moderate levels were less frequent (3.5%, 11%, and 3%, respectively). This indicates that while most students are within normal ranges, anxiety and mild depression require attention.

Variables	Gender	N	Mean	SD	df	t-test	Sig (2 tailed)
Depression	Boys	97	9.07	1.922	198	1.487	.139
	Girls	103	8.63	2.249			
Anxiety	Boys	97	7.48	1.393	198	-1.198	.232
	Girls	103	7.74	1.584			
Stress	Boys	97	12.38	2.717	198	.451	.652
	Girls	103	12.19	3.125			
Mental Health	Boys	97	28.94	3.818	198	.621	.536
	Girls	103	28.56	4.658			

Table 2: Showing mean difference on mental health of higher secondary school students in Hooghly district regarding gender.

Interpretation

The analysis reveals no significant difference in mental health scores, including depression, anxiety, and stress, between boys and girls among higher secondary students in the Hooghly district. The t-tests for depression ($t = 1.487$, $p = .139$), anxiety ($t = -1.198$, $p = .232$), stress ($t = .451$, $p = .652$), and overall mental health ($t = .621$, $p = .536$) all show p-values above the 0.05 significance level. Thus, gender does not significantly impact mental health among these students, supporting the hypothesis that mental health differences by gender are not statistically significant.

Variables	Gender	N	Mean	SD	df	t-test	Sig (2 tailed)
Depression	Joint	66	8.71	1.944	198	-.626	.532
	Nuclear	134	8.91	2.181			
Anxiety	Joint	66	7.56	1.383	198	-.360	.719
	Nuclear	134	7.64	1.553			
Stress	Joint	66	11.89	2.695	198	-1.328	.186
	Nuclear	134	12.48	3.028			
Mental Health	Joint	66	28.17	4.349	198	-1.349	.179
	Nuclear	134	29.03	4.211			

Table 3: Showing mean difference on mental health of higher secondary school students in Hooghly district regarding type of family.

Interpretation

The analysis indicates no significant difference in mental health scores, including depression, anxiety, and stress, between students from joint and nuclear families among higher secondary students in the Hooghly district. The t-tests for depression (t = -0.626, p = .532), anxiety (t = -0.360, p = .719), stress (t = -1.328, p = .186), and overall mental health (t = -1.349, p = .179) all yield p-values greater than the 0.05 significance level. Thus, the hypothesis is supported, as family type does not significantly impact mental health in this sample.

Variables	Gender	N	Mean	SD	df	t-test	Sig (2 tailed)
Depression	XI	100	8.72	2.188	198	-.840	.402
	XII	100	8.97	2.017			
Anxiety	XI	100	7.60	1.497	198	-.141	.888
	XII	100	7.63	1.502			
Stress	XI	100	12.40	3.137	198	.554	.580
	XII	100	12.17	2.716			
Mental Health	XI	100	28.72	4.330	198	-.083	.934
	XII	100	28.77	4.221			

Table 4: Showing mean difference on mental health of higher secondary school students in Hooghly district regarding grade.

Interpretation

The analysis reveals no significant difference in mental health scores, including depression, anxiety, and stress, between students in grades XI and XII among higher secondary students in the Hooghly district. The t-tests for depression (t = -0.840, p = .402), anxiety (t = -0.141, p = .888), stress (t = 0.554, p = .580), and overall mental health (t = -0.083, p = .934) all show p-values above the 0.05 significance level. Thus, the hypothesis is supported, indicating that grade level does not significantly impact mental health in this group.

Variable	Age	
	Pearson Chi-Square (χ^2)	Asymp. Sig. (2-sided)
Depression	7.944	.439
Anxiety	3.967	.860
Stress	4.997	.758

Table 5: Showing the association between level of mental health and age of higher secondary school students in Hooghly district.

Interpretation

The chi-square analysis indicates no significant association between age and mental health levels, including depression, anxiety, and stress, among higher secondary school students in the Hooghly district. The Pearson chi-square values for depression ($\chi^2 = 7.944$, p = .439), anxiety ($\chi^2 = 3.967$, p = .860), and stress ($\chi^2 = 4.997$, p = .758) all have p-values above the 0.05 significance level. Therefore, the hypothesis is supported, suggesting that there is no significant association between age and the mental health levels of these students.

Discussion

Mental health is widely seen as essential to adolescents' academic achievement, social integration, and personal growth. The present study of higher secondary students in Hooghly district, West Bengal, investigating the mental health dimensions of depression, anxiety, and stress, revealed that the majority of students exhibit normal mental health levels, albeit with significant occurrences of minor symptoms in certain domains. For example, 65.5% of students had normal depression levels, 31% demonstrated mild symptoms, and 3.5% presented moderate symptoms. Anxiety was classified as normal in 49.5% of students, mild in 39.5%, and moderate in 11%. Stress levels were predominantly normal (77%), with 20% classified as mild and 3% as moderate, indicating possible areas for mental health intervention (Lovibond & Lovibond, 1995). The research additionally examined demographic variables, including gender, family structure, grade level, and age, to assess their impact on students' mental health. Statistical analysis indicated no significant gender disparities in mental health, consistent with research suggesting that mental health outcomes often do not differ markedly between teenage males and females (Beck & Clark, 1997). The family type (joint vs. nuclear) exhibited no significant effect on students' mental health, indicating that family structure alone may not affect adolescents' mental well-being when alternative support systems are available (Joseph, 2015). Moreover, comparisons between students in grades XI and XII shown no significant differences in depression, anxiety, or stress levels, suggesting that academic advancement within the secondary school environment did not markedly affect mental health conditions among this cohort (Patel, 2020). Age exhibited no significant correlation with mental health outcomes in this population, as established by chi-square analysis. This corroborates other research indicating that age within this adolescent range may not significantly affect mental health outcomes, while other developmental stages may produce varying patterns (Mineka, Watson, & Clark, 1998). The findings highlight the necessity of offering accessible mental health resources in schools, especially considering the widespread occurrence of mild depression and anxiety symptoms. Implementing school-based counselling and support services can provide early intervention, assisting pupils in managing pressures and mitigating the risk of more serious mental health disorders. Research repeatedly demonstrates that such measures are useful in fostering resilience, enhancing emotional regulation, and diminishing stigma associated with mental health disorders (American Psychological Association, 2022; National Alliance on Mental Illness, 2021). In summary, although the majority of students demonstrate normal mental health, a considerable fraction encounters moderate symptoms of sadness, anxiety, and stress. Proactively addressing these difficulties via specialised mental health programs can facilitate healthier transitions into adulthood, providing students with enduring coping skills and improving both academic and personal outcomes.

CONCLUSION

The study highlights the importance of mental health support for higher secondary students, considering the widespread occurrence of mild depression, anxiety, and stress in this

demographic. In the contemporary, rapid-paced, and competitive landscape, mental health concerns can adversely influence students' academic performance, social interactions, and overall well-being, thereby hurting their everyday life. In the absence of appropriate intervention, even modest symptoms may intensify, resulting in enduring mental health issues. The results underscore the necessity for accessible, school-based mental health options, including counselling and peer support programs, which can furnish pupils with vital coping mechanisms. Future study ought to investigate particular demographic and socio-economic characteristics that may affect adolescent mental health, along with the efficacy of diverse school-based mental health interventions. By meeting these needs, educational institutions can significantly contribute to cultivating a supportive atmosphere that enhances resilience, emotional well-being, and academic achievement.

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